

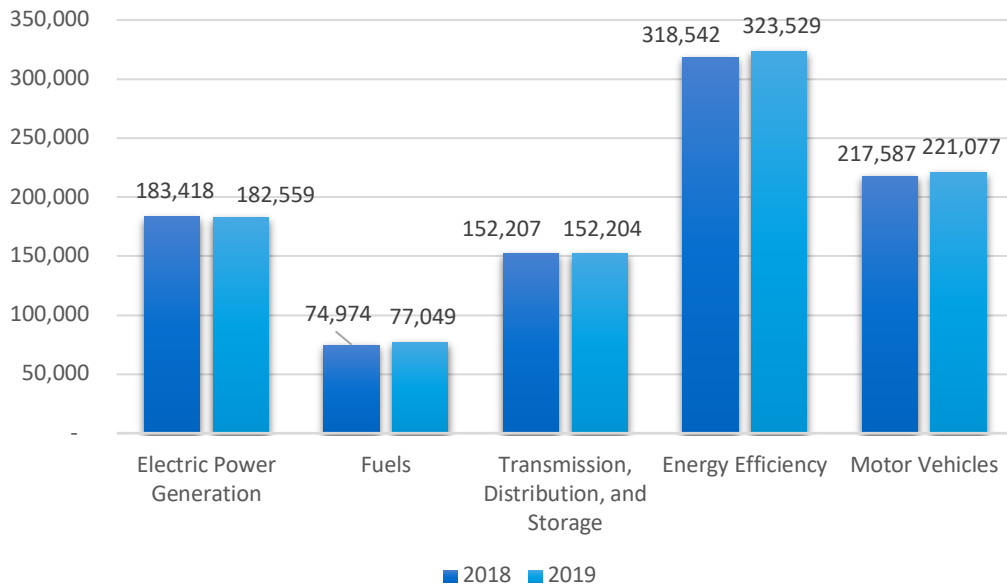
# California

## ENERGY AND EMPLOYMENT — 2020

### Overview

California has an average concentration of energy employment, with 411,811 Traditional Energy workers statewide (representing 12.0 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 182,559 are in Electric Power Generation, 77,049 are in Fuels, and 152,204 are in Transmission, Distribution, and Storage. The Traditional Energy sector in California is 2.3 percent of total state employment (compared to 2.3 percent of national employment). California has an additional 323,529 jobs in Energy Efficiency (13.6 percent of all U.S. Energy Efficiency jobs) and 221,077 jobs in Motor Vehicles (8.6 percent of all U.S. Motor Vehicle jobs).

**Figure CA-1.**  
**Employment by Major Energy Technology Application**



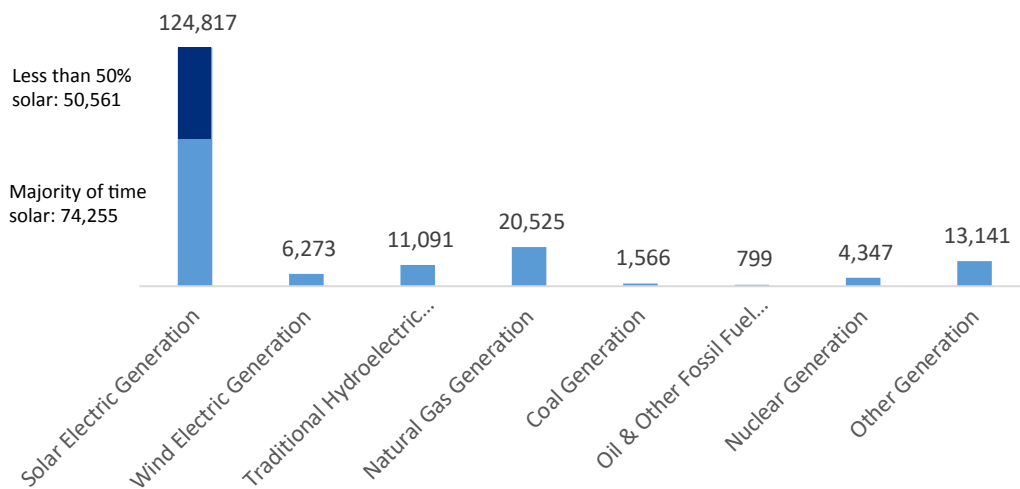
Overall, Traditional Energy jobs grew by 0.3 percent since the 2019 report, increasing by 1,212 jobs over the period. Energy Efficiency jobs added 4,988 jobs (1.6 percent) and motor vehicles added 3,490 jobs (1.6 percent).

## Breakdown by Technology Applications

### ELECTRIC POWER GENERATION

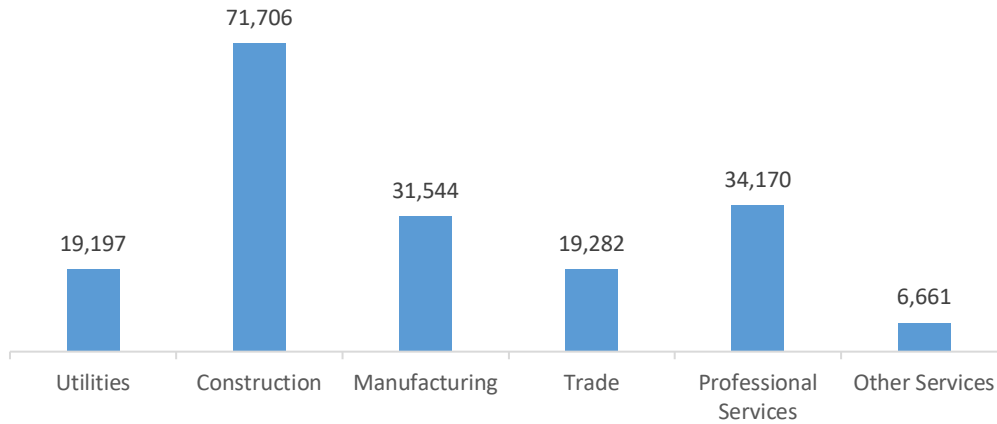
Electric Power Generation employs 182,559 workers in California, 20.5 percent of the national total and losing 859 jobs over the past year (-0.5 percent). Solar makes up the largest segment of employment related to Electric Power Generation, with 124,817 jobs (down -1.3 percent), followed by traditional fossil fuel generation at 22,890 jobs (down -0.0 percent).

**Figure CA-2.**  
**Electric Power Generation Employment by Detailed Technology Application**



Construction is the largest industry sector in Electric Power Generation, with 39.3 percent of jobs. Professional and business services are next with 18.7 percent.

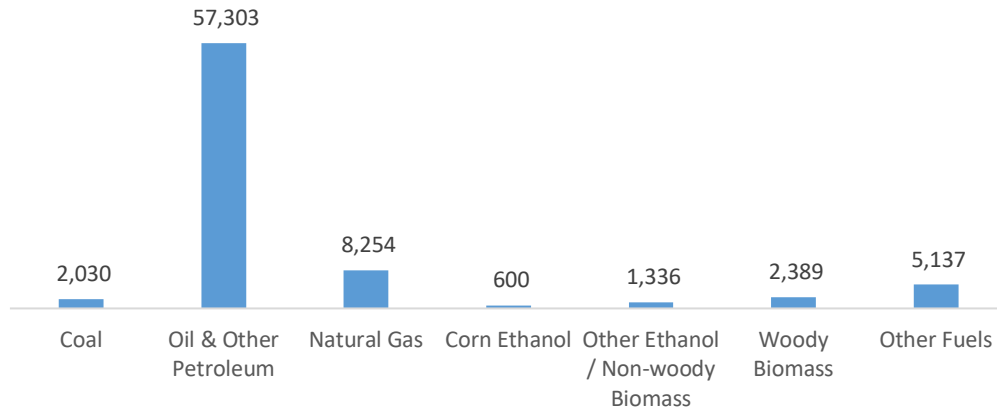
**Figure CA-3.**  
**Electric Power Generation by Industry Sector**



**FUELS**

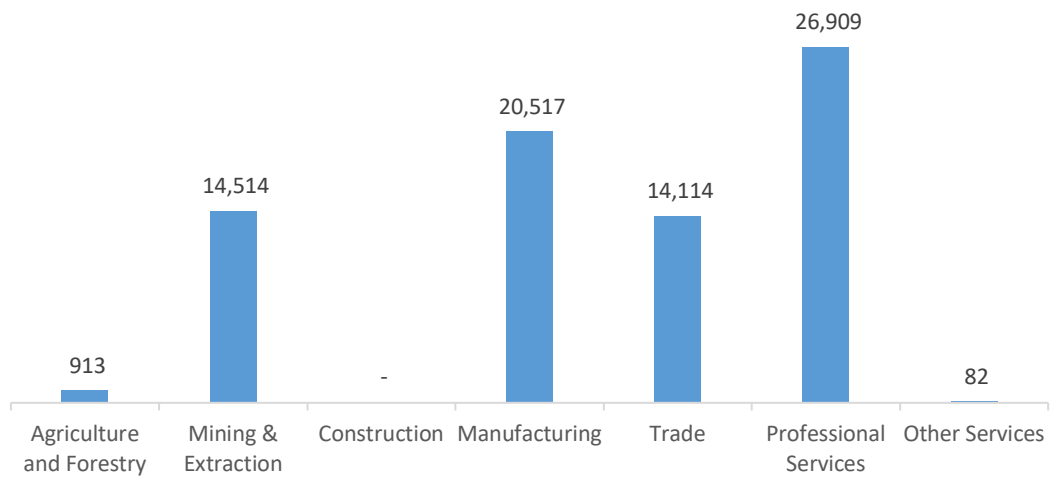
Fuels employs 77,049 workers in California, 6.7 percent of the national total, up 2.8 percent over the past year. Petroleum and other fossil fuels makes up the largest segment of employment related to Fuels.

**Figure CA-4.**  
**Fuels Employment by Detailed Technology Application**



Professional and business services jobs represent 34.9 percent of Fuels jobs in California.

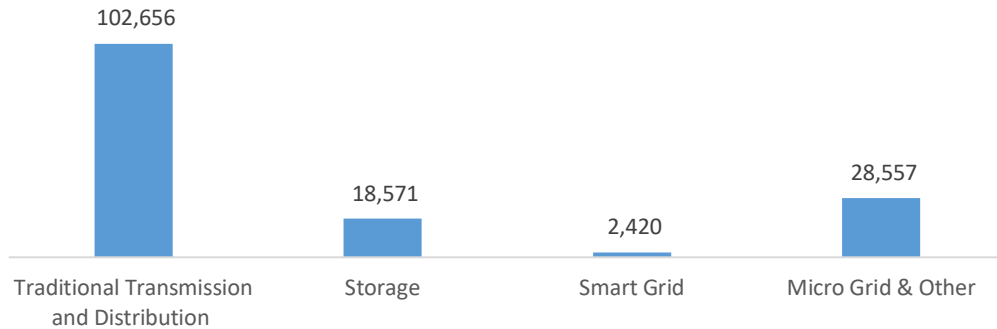
**Figure CA-5.**  
**Fuels Employment by Industry Sector**



## TRANSMISSION, DISTRIBUTION AND STORAGE

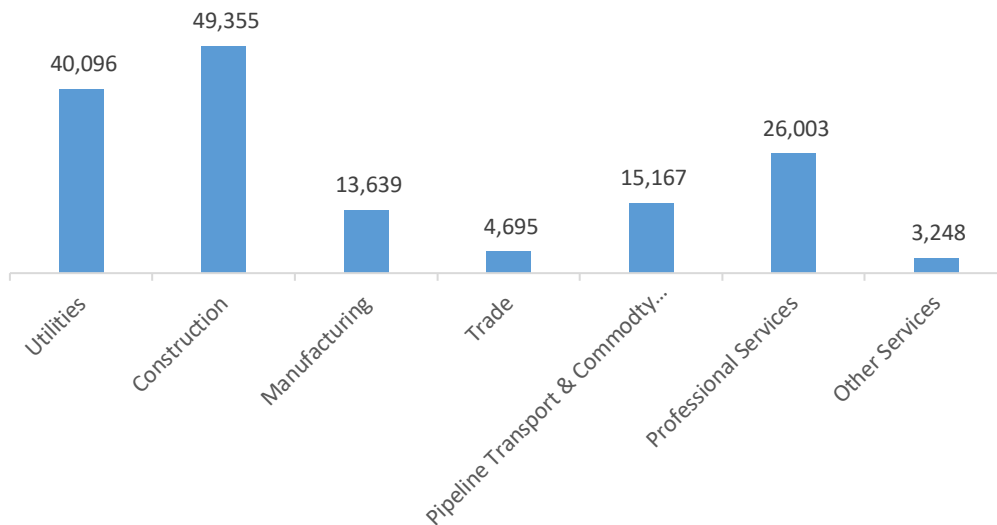
Transmission, Distribution, and Storage employs 152,204 workers in California, 11.0 percent of the national total, down 0.0 percent or 4 jobs since the 2018 report.

**Figure CA-6.**  
**Transmission, Distribution and Storage Employment by Detailed Technology**



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in California, with 32.4 percent of such jobs statewide.

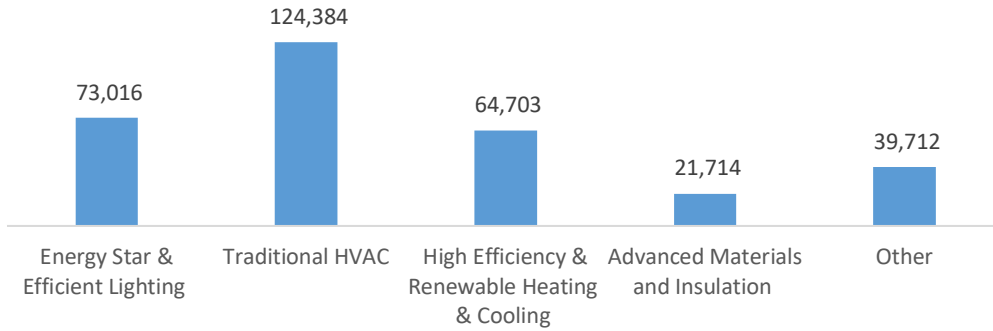
**Figure CA-7.**  
**Transmission, Distribution and Storage Employment by Industry Sector**



## ENERGY EFFICIENCY

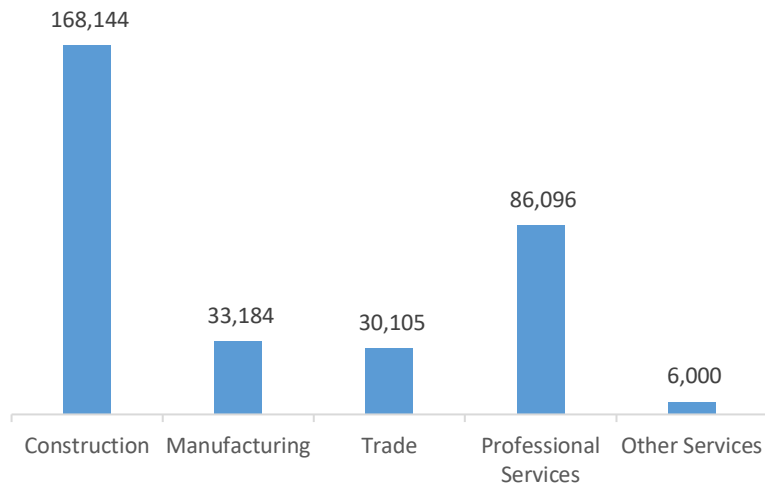
The 323,529 Energy Efficiency jobs in California represent 13.6 percent of all U.S. Energy Efficiency jobs, adding 4,988 jobs (1.6 percent) since last year. The largest number of these employees work in (traditional HVAC firms, followed by ENERGY STAR and efficient lighting.

**Figure CA-8.**  
**Energy Efficiency Employment by Detailed Technology Application**



Energy Efficiency employment is primarily found in the construction industry.

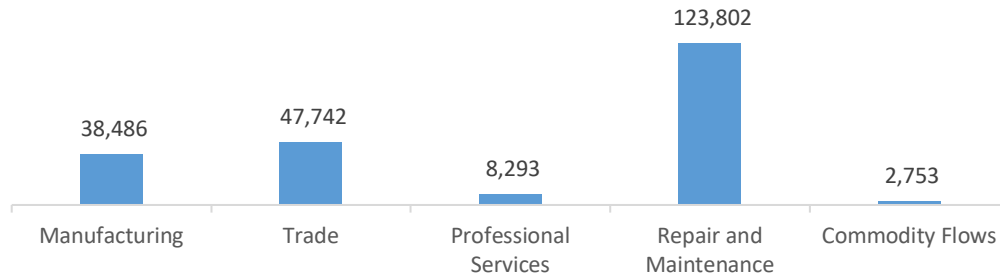
**Figure CA-9.**  
**Energy Efficiency Employment by Industry Sector**



## MOTOR VEHICLES

Motor Vehicle employment accounts for 221,077 jobs in California, up 3,490 jobs over the past year (1.6 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

**Figure CA-10.**  
**Motor Vehicle Employment by Industry Sector**



## Workforce Characteristics

### EMPLOYER GROWTH

Employers in California are more optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (5.3 percent versus 3.2 percent nationally). Energy Efficiency employers expect to add 15,150 jobs in Energy Efficiency (4.7 percent) and Motor Vehicles employers expect to add 8,179 jobs (3.7 percent) over the next year.

**Table CA-1**  
**Projected Growth by Major Technology Application.**

Technology	State Projected Growth Next 12 Months (percent)	U.S. Projected Growth Next 12 Months (percent)
Electric Power Generation	7.8	4.8
Electric Power Transmission, Distribution, and Storage	3.1	3.5
Energy Efficiency	4.7	3.0
Fuels	3.5	1.7
Motor Vehicles	3.7	3.1

## HIRING DIFFICULTY

Over the last year, 36.2 percent of energy-related employers in California hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Motor Vehicles.

**Table CA-2**  
**Hiring Difficulty by Major Technology Application.**

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)
Electric Power Generation	22.8	65.3	11.9
Electric Power Transmission, Distribution, and Storage	20.6	66.7	12.7
Energy Efficiency	37.1	47.7	15.2
Fuels	27.1	48.7	24.2
Motor Vehicles	41.4	46.0	12.6

Employers in California gave the following as the top three reasons for their reported difficulty:

1. Lack of experience, training, or technical skills
2. Competition/ small applicant pool
3. Difficulty finding industry-specific knowledge, skills, and interest

Employers reported the following as the three most difficult occupations to hire for:

1. Management (directors, supervisors, vice presidents) — \$48.93 median hourly wage
2. Sales, marketing, or customer service — \$35.35 median hourly wage
3. Installation workers — \$27.91 median hourly wage